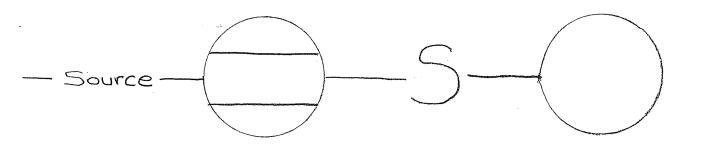
## 2012 State Convention Ag Mechanics Stations:

1. **Welding**. All Ag Mechanics team members (4 maximum or 3 minimum) must have safety glasses, boots, and appropriate apparel for welding. FFA members will have their choice of electrodes for the welded sample. They must place their parts in the appropriate location and apply the correct welding process.

The sample plan is being released with this bulletin. A photo will be distributed later this month.

2. **Electrical**. FFA members will wire the electrical circuit described by the symbolic language in the drawing. Code requirements for conductor length, hook directions, wire per terminal, correct polarity, as well as other common practices will be judged. Safety glasses, familiarity with tool use and the Maine Public Service manual will be very helpful in this part of the CDE. MPS manual is available on line at the Maine FFA website. Students will be using 14/2 with ground for this exercise.



Use MPS manual symbols page to interpet above symbols.

## Ag Mechanics Team event 2012

FFA members will be expected to prepare for summer a Briggs and Stratton Model 80202 0695 01 80041603 or 80202 1672 02 85021803 engine. It will be assumed that this engine powers small rototillers.

Jobs that they will be expected to perform include:

- 1. Check spark using the spark tester from Briggs and Stratton. Condition of the spark plug will be checked.
- 2. Oil amount and type must be determined and the appropriate oil selected from several choices.
- 3. Check and record engine compression using a compression gauge.
- 4. Check air filter and make appropriate responses to what you find.
- 5. Adjust carb needle valve for initial starting purposes. (1 1/2 turns from seat).
- 6. Add small amount of fuel and start engine. Adjust carb so engine will idle and smoothly accelerate from idle.
- 7. Drain fuel and clean up the area where team exercise has occurred.

FFA members may use Briggs and Stratton manuals. They must be familiar with spark testers, common hand tools, fuel safety, and feeler gauge for spark plug gap.

